

# RAINBOW CANYONS AMATEUR RADIO CLUB NEWSLETTER



Club Website: [www.rcarc.info](http://www.rcarc.info) Number 8 – Vol. 3 March 2026

## Club Meeting Information

The RCARC meets at 7:00 pm. on the 2<sup>nd</sup> Tuesday of each month at the Cedar City Senior Center, 489 E. 200 South. Down Stairs.

### 2026 Club Officer's

#### President:

Fred Govedich  
KI7TPD

1-435-559-2682

[fred.govedich@gmail.com](mailto:fred.govedich@gmail.com)

#### Vice President

Ron Shelley  
K7HDX

1-623-261-6555

[ronald.shelley@gmail.com](mailto:ronald.shelley@gmail.com)

#### Secretary

Bonnie Bain  
KI7WEX

1-435-865-1653

[Bonnie.bain@gmail.com](mailto:Bonnie.bain@gmail.com)

#### Treasurer

Linda Shokrian  
KG7PBX

1-435-867-5914

[lgshokrian@gmail.com](mailto:lgshokrian@gmail.com)

#### Newsletter Editor/Historian

Dennis L. West  
W6DLW

1-760-953-7935

[rcarcnewsletter@gmail.com](mailto:rcarcnewsletter@gmail.com)



CQ, CQ, Happy St. Patricks  
Day

Tuesday March 17, 2026



## Presidents Message

Dear Fellow Amateur Radio  
Operators,

The year is off to an interesting start with on and off again snow and alternating warm days it has been a very strange month of weather. Hopefully, you can take advantage of the good days and get out and play. Thank you, Russ and Brandt for the presentation/discussion on using Slow Scan TV (SSTV). Lots of good information and what I hope will turn into a fun way to use HAM radio for sending and receiving images. It is nice to see that you can use a basic setup of a phone and HT to get started. We have our next Technician class starting on March 5<sup>th</sup>, so let potential students know! This is a great opportunity for people interested in getting their HAM license to become prepared! Start thinking about the club swap meet, the plan is to have it in May so start gathering radio gear that you want to sell, and maybe you can find a new rig that you want!

### RCARC Club Nets:

7 am. Breakfast Net - Monday – Saturday – 146.760.

12:30 p.m. Daily – Utah Beehive Net On 7.272.

8 pm. Wednesday – Panguitch Net – 147.160.

7:30 p.m. Thursday– Morse Code Net- This is a Zoom Meeting.

8:00 p.m. Thursday's (Mtn Time) – Western Digital Net. Using FLDIGI, FLMSG AND FLAMP – 3.581 +, 1500/MFSK32.

9:00 p.m. Daily – Friendship Net – 146.760.

11 am. Saturdays (Mtn. Time) QCWA – 160 Net, Utah Chapter, 12 pm. Freq. 7.272.

8 pm. Sunday's – New Harmony Net – Bumblebee Repeater. – 146.680.

7 pm Sunday's Southern Utah 2 Meter SSB Roundtable at 7 pm on 144.250 MHz

### Local Repeaters:

#### Intermountain Intertie:

146.940 MHz – Tone 100.0 Frisco.

146.800 MHz – Tone 100.0 Blow  
Hard

147.200 MHz + Tone 100.0

Tod's/Hatch

146.820 MHz – Tone 100.0 Utah Hill

#### Iron Mountain

146.760 MHz – Tone 123.0 Hz

146.980 MHz – Tone 100.0 Hz

448.800 MHz – Tone 100.0 Hz

connected to Dutton.

449.500 MHz – Tone 100.0 Hz – Off Air

448.400 MHz -- Tone 100.0/FM & DMR

#### Bumblebee/New Harmony:

146.680 MHz – Tone 100.0 Hz

Continued page 2

## Save The Date

**March 10, 2026**

### **RCARC Club Meeting.**

7:00 pm. Cedar City Senior Center, 489 E. 200 South.  
Presentation: TBD

**April 14, 2026**

### **RCARC Club Meeting.**

7:00 pm. Cedar City Senior Center, 489 E. 200 South.  
Presentation: TBD

**May 12, 2026**

### **RCARC Club Meeting.**

7:00 pm. Cedar City Senior Center, 489 E. 200 South.  
Presentation: TBD

**June 9, 2026**

### **RCARC Club Meeting.**

7:00 pm. Cedar City Senior Center, 489 E. 200 South.

## **Presidents Message Continued from Page 1**

The bands have been really active so I encourage you all to play, share, and have fun on the radio! Don't forget that we all have strengths and weaknesses but we are all interested in radio communications and can benefit from each other. If you are interested in any aspect of HAM radio please explore the topic, experiment, and share what you have done with the group! That is what makes this such a fun hobby! Don't be shy, we are all friends here!

In service,

Fred Govedich (KI7TPD)

## Local Repeaters continued. From page 1

### Rowberry:

449.925 MHz – Tone 100.0 VHF  
Remote

### Dutton:

147.160 MHz + Tone 100.0 Hz.

### Winlink- Gateways

Local VHF – K7HDX-10 – 145.030  
Portable VHF – K7HDX –11-- 145.050  
Local VHF – KG7VEI -- 145.070

## **RCARC Monthly Breakfast**

Please come join us on the first Saturday of each month at 9:00 am for our club breakfast. We meet at the Golden Corral Buffet & Grill (In the back room), 1379 S. Main Street, Cedar City. Their menu offers an unmatched variety of quality foods from breakfast to dinner.

See you there.



**Happy Birthday and  
Anniversary to those  
celebrating in March**



# Happy Saint Patricks Day

# Breakfast & Friendship Net Awards

February 2026

Breakfast Net		Friendship Net		
<b>First Place</b>	<b>Second Place</b>	<b>First Place</b>	W6DLW - Dennis	<b>Third Place</b>
K2MFK - Kevin	N7SIY - Sylvia	K7HDX - Ron	N7BO - Russ	N7SND - Larry
KG7PBX - Linda	K7ZI - Dick	N7WWB - Darlene	N7SIY - Sylvia	
KI7TPD - Fred		K7NKH - Lee	W0KLH - Kevin	
KI7WEX - Bonnie	<b>Third Place</b>	KA7J - Lance	<b>Second Place</b>	
W0KLH - Kevin	KE6ZIM - Johnny	KB7QXB - Shirleen	KK7FFL - Maddie	
KB7QXB - Shirleen		K7ZI - Dick	KI7LUM - Bruce	
N7SND - Larry		KJ7LTQ - Brant		
N7BO - Russ		KI7TPD - Fred		
		KI7WEX - Bonnie		

**Rainbow Canyons Amateur Radio Club  
Treasurer Report Feb 10, 2026**

Bank balance Jan 1, 2026	<b>\$2,510.98</b>
Deposit - Check order credit	+ 36.21
Membership - NR7T, K7AK, KK7FLB, N7BO & KB7QXB, NL7EL, KC7IHE, KI7LUM Family, KN7RS & KD6ZJR, K7ZI, N6NQX, K7NKH, KI7LVB & KI7LVC, N7MZZ & KM7BYA, KC6WFI & KD6HYH, KG7VVN. W6DLW family, K7HDX & N7WWB, KA&J, W0KLH, K2MFK, N7SND, WB7UOZ	+ 370.00
Expenses	
Rocky mountain Power (98 repeater elec exp)	- 11.31
Field Day 3 peaks Reservation	-80.00
Bank Balance Jan 31, 2026	<b>\$2,825.88</b>
Feb Outstanding	
Membership WA7GVL, KE6ZIM	+30.00
Expenses - Rocky Mountain Power (due 2/17/26)	-10.42
Funds Available after Feb 17, 2026	<b>\$2,845.46</b>
Submitted by Linda Shokrian KG7PBX 2025 RCARC Treasurer 435-867-5914	

## RCARC Upcoming Events

**March 5, 2026 at 6:00 pm RCARC Technician Class. See flier on page 12. Cedar City Senior Center, 489 E. 200 S. North side of building, Lower level.**

**March 10, 2026 RCARC Club Meeting. 7:00 pm. Cedar City Senior Center, 489 E. 200 S. North side of building, Lower level. Presentation: To Be Determined.**

**April 14, 2026 RCARC Club Meeting. 7:00 pm. Cedar City Senior Center, 489 E. 200 S. North side of building, Lower level. Presentation: To Be Determined.**

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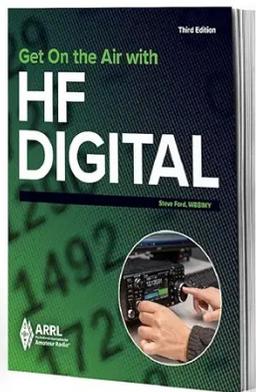
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## RCARC Book Giveaway.

Books are donated by Linda Shokrian (KG7BPX). The book below will be given away at the March Meeting.



The Book below was given away to Brant (KJ7LTQ) at the February 10, 2026 meeting



Congratulations

**Brant**

See Picture on Page 17

## Contact Us

**Mailing Address:**  
195 E. Fiddler Canyon Rd.  
Cedar City, Utah 84721  
**Club Email:**  
Cedarcity.rcarc@gmail.com  
**Newsletter Email:**  
rcarcnewsletter@gmail.com  
**Website:**  
www.rcarc.info  
**Facebook Page:**  
<https://www.facebook.com/groups/440325486875752>  
**To Join RCARC or Pay dues:**  
Go to [www.rcarc.info](http://www.rcarc.info) select "Club Info" then join RCARC. Follow the instructions on the template.  
**Make checks payable to RCARC.**  
**Please write call sign on check**

*Sunday, March 8, 2026, 3:00:00 am*  
— Local Daylight Time —

**Daylight Saving Time 2026**  
**Spring Forward!**

**Sunday, March 8, 2026**  
2:00:00 am clocks are turned forward 1 hour to



2:00 AM



3:00 AM

*Sunday, March 8, 2026, 3:00:00 am*  
— Local Daylight Time —

**Daylight Saving Time 2026**  
**Spring Forward!**



## Buzz's March Safety Tip(s)



### Ham Shack Safety in Utah

Ham radio safety in Utah demands rigorous, NEC-compliant grounding to manage intense summer lightning, especially in dry/rocky soil. Key practices include bonding all tower/mast grounds to the home's main electrical service entrance (single-point ground), installing exterior lightning arresters on coax, and using heavy-gauge copper for low-impedance paths. In arid conditions, enhance ground conductivity by driving multiple, deeper, or interconnected, rods (chemical ground rods may be necessary).

#### Essential Utah Ham Radio Safety Practices:

•**Single-Point Grounding & Bonding:** Bond all antennas, masts, towers, and coax shields together outside the house to a single, common ground electrode system (GES) before entering the home. This prevents differential voltage between systems during a strike.

**Lightning Arresters:** Install high-quality coaxial surge protectors (lightning arresters) outside the building on a grounded plate, typically where the feed line enters the house.

**Antenna/Tower Grounding:** Use a minimum 1 AWG copper wire or copper strap, minimizing bends to prevent inductance. Drive three or more 8-foot, 5/8-inch copper-clad steel ground rods in a triangle around the tower base.

•**Managing Poor Soil Conductivity:** In dry, rocky, or shale soil, multiple interconnected ground rods are required to achieve a low-resistance path. Consider using soil conductivity treatments or connecting to a well casing, if available.

•**Physical Disconnection:** The ultimate safety measure is physically disconnecting coax and power cables during storms, storing the cables away from equipment to prevent arcing.

•**RF Safety (Grounding vs. Lightning Protection):** Keep antenna systems (lightning protection) separate from station "RF grounds" (counterpoise) inside the shack to reduce noise, but connect them all to the same outside, primary, earth-ground.

Continued on page 6

# Ham Shack Safety in Utah

Continued from Page 5

**Protection for Feed lines:** Ensure a "drip loop" is used in the coax before entering the house to prevent water from following the cable inside.

Ensure all connections are weatherproofed (e.g., Coax-Seal, electrical tape) to prevent corrosion, which renders grounds ineffective over time. End.

## Note:

Safety begins with a proper attitude. Make it a habit to plan your work carefully and always consider the safety aspects of your Ham Radio activities. It is also important to learn as much as possible about what could *go wrong* so we can avoid factors that might result in accidents. Amateur Radio activities are not inherently hazardous, but like many things in modern life, it pays to be informed. Stated another way, while we long to be creative and innovative, there is the need to act responsibly. A good attitude toward safety also requires us to be knowledgeable about common safety guidelines and follow them faithfully. While these Web pages may offer some important safety guidelines, you should not consider them to be an all inclusive discussion on this topic. Guidelines can't possibly cover all situations you might encounter, but if you approach a task with a measure of "common sense," you should be able to work safely. Several ARRL publications also provide additional information of safety guidelines and practices. Learning about safety should always be an ongoing process. *Always remember: There is no substitute for common sense.*





# RADIO NEWS

H. GERNSBACK, Editor and Publisher  
SYLVAN HARRIS, Managing Editor

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No. 9

## IS THERE MONEY IN RADIO INVENTIONS?

By HUGO GERNSBACK

**“W**HO makes the money in radio today?” is the question that is asked most frequently. When, in 1922, the real radio boom was launched, everybody, as it seemed, with a few dollars to spare, jumped into the radio business. Most of those who did have probably regretted this step, on account of their inexperience in either radio matters, business matters, or both.

Speaking generally, it may be said that whatever real money is made today in radio is made by a number of set manufacturers and manufacturers of certain parts. There are, of course, others connected with the radio industry who are prospering as well, but the types mentioned seem to comprise the bulk of the successful ones.

Not every set manufacturer is prosperous. Quite the contrary. Many are not; and those who are not, may trace their failure to first, lack of capital, and second, lack of knowledge of the business itself, or both.

The industry has now settled down to such a degree that we need not expect any revolutionary radio inventions for some time to come. Just the same, the future radio historian will be impressed with the fact that every year has brought about what may be termed “silent revolutions”; not at all conspicuous immediately, but working on gradually, nevertheless. To appreciate this, all you have to do is to compare a 1926 radio set with one as late as 1924. You will be struck immediately with the number of vital changes, if you observe it closely enough.

For instance, in 1924 the straight-line frequency condenser was never heard of. We were still using the straight-line wave-length condenser. Of the vernier dial, now so popular, people had only the vaguest notion. Now look at the present-day sets and notice the silent revolution that has taken place. Nearly all of the new sets have straight-line frequency condensers and many are equipped with vernier dials. To be sure, these improvements are not vital; they do not affect the entire operation of the set. A set without a vernier dial and without a straight-line frequency condenser, may yet be an excellent set; and there are hundreds of thousands of these being operated every day right now by their owners.

But there must be good and sufficient reasons for using straight-line frequency condensers and vernier dials, otherwise the manufacturers would not adopt them. This brings us to the question, Is there money in radio inventions?

After scanning the field and making investigations, I find that the answer must be in the affirmative. There is, indeed, a tremendous amount of money to be made in radio inventions, or shall we call it “radio improvements”? For instance, I find that within the last eight months considerably over two million straight-line frequency condensers were manufactured by a number of radio concerns. This does not represent all of the manufacturers; and the total output must be considerably higher. In fact, there is very little demand for the old type condenser right now, and certain of such types could not be given away.

If it had been possible for some one to patent the straight-line frequency condenser, he would have made a fortune out of this idea alone. Unfortunately, or perhaps fortunately for the radio industry, the principle of the straight-line frequency condenser was not so new that a patent could be granted; so the entire industry shares in the benefits. As soon as one manufacturer started to make this type of condenser, and realized its value, all of them followed suit, and practically all of them have reaped a harvest on this comparatively simple idea.

Exactly the same thing may be said of the vernier dial. Here is a

close parallel to the condenser just mentioned, and while the first vernier dial, manufactured by a Chicago concern, was patented, the patent, for obvious reasons, could cover only certain mechanical elements. It was not possible to obtain a basic patent on the idea. So the minute it was seen that here was a valuable thing, dozens of other radio manufacturers started to make vernier dials. Practically all of them have been successful in marketing their products. There is one manufacturer in the East who has already manufactured close to half a million of these dials. He, as well as a number of others, is also reaping a harvest from this simple invention.

The vernier dial and the straight-line frequency condenser are two excellent examples to show prospective inventors or designers that, given a meritorious radio idea, and provided it is worked out satisfactorily, a good-sized fortune can be made from such an idea. The important thing to remember is that the device in question must do something that existing devices do not do, or must improve present devices.

If I may make a broad statement, I would put down as an axiom that *anything making for better radio reception will be welcomed by the radio industry* and, providing it can be manufactured cheaply and economically, will bring its originator a good-sized fortune, also granting that he has business ability.

Further, the designer and inventor should always be sure to know the tendency of the times. Most radio parts manufacturers have found out to their sorrow that it is a most expensive thing not to keep up with the times. Four years ago, for instance, the demand for crystal detector receiving sets was tremendous. There was more demand than it was possible for the manufacturers to meet. Overnight, with the appearance of the first popular vacuum tube set, the demand for crystal sets fell off, and is today at its lowest ebb. It is doubted whether the crystal set can come back. Within a few months the demand decreased sharply, due to the appearance of the tube sets. Several large manufacturers lost fortunes because they did not follow the tendency of popular demand, but committed themselves for huge amounts of parts going into crystal sets. They still have these parts on hand, if they did not sell them for scrap.

The inventor who is dreaming of fortunes in an improved crystal receiver is, therefore, on the wrong track. He may make the most wonderful crystal receiver imaginable, and he may get the best patent in the world on such a receiver. The chances are, however, that he will not reap a fortune on it, simply because the present tendency is against crystal receivers; and while, of course, there are still some being manufactured, in goodly quantities, the demand is on the decline. The same may be said of a host of other clever inventions on which it would not even pay to take out a patent.

My desk is a clearing house for many hundreds of new ideas, and there is not a day that some new idea does not crop up. The most popular one, during the past few months, has been that of improvements on switchpoints, particularly those that do not require soldering. The misguided inventors and would-be inventors, however, fail in every instance to notice that no one is using switchpoints today. How many radio sets are now using switches in which switchpoints are required? It is true that in 1921 and 1922 there were actually carloads of switchpoints sold. But even most of the radio stores today do not carry switchpoints any more, for the simple reason that there is no demand for them.

There is money in radio inventions, if you can hit upon something for which there is a crying demand, and something that will make for better radio reception.

# RCARC February Membership Monthly Meeting Pictures



Fred (KI7TPD) visiting before the meeting starts



Fred (KI7TPD) conducting the pledge of allegiance



Fred (KI7TPD) checking on the meeting presentation setup.



Fred (KI7TPD) conducting meeting business



Russ (N7BO) and Brant (KJ7LTQ) preparing the Presentation on Slow Scan ATV



Brant (KJ7LTQ) was the monthly book winner.  
HF Digital

Continued Next column

Continued on page16

# RCARC February 7, 2026 Breakfast Pictures



Dick (K7ZI) and Ron (K7HDX) enjoying breakfast and conversation



Sylvia (N7SIY) getting ready to eat

Continued next column



Fred (Ki7TPD) in right foreground with Tim KI7LVC and Tammy (KI7LVB) at rear with Dick (K7Z)



Russ (N7BO) and Shirleen (KB7QXB) on left with other club members enjoying breakfast

# Ham Radio Terminology Word Scramble

**See page 16 for Word Scramble Answers**

#	Scramble	Hint	Word
1.	DOEMM	Modulates a Radio Signal	
2.	YATETRYB	Converts chemical into Energy	
3.	PIDITEARGE	Use to re transmit Signal	
4.	TRODIECR	In Front of Driven Element	
5.	EIVCO	To Transmit Speech	
6.	TKEICT	Amateur Radio License	
7.	HCGAER	Power to 100%	
8.	MPRUJE	Used To Connect Two Parts	
9.	ZHRET	Alternating Current Frequency	
10	LTIFRE	Allow Some Signals to Pass	

## RCARC Club History

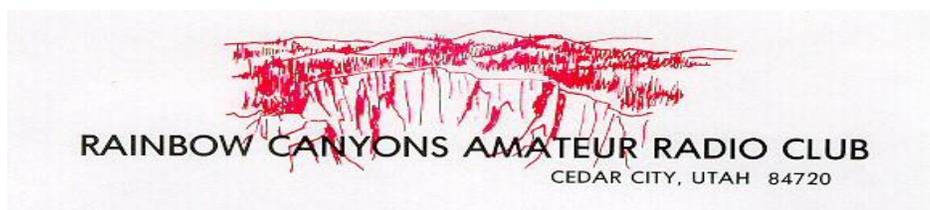
The following history is as accurate as any of us can remember - time takes its toll!

Although there had been discussions about forming an amateur radio club in Cedar City as early as 1961. The club was not formally founded until the spring of 1967.

An organizational meeting was held at the home of Roland and Phyliss Weir with the following amateurs making up the original charter members: Roland Weir, W6UCF, Phyllis Weir, K7WVT, Bob Williams, W7MUG (SK), Doris Williams, W7MXX (SK), Roger Chidester (call unknown (SK), Sharon Chidester, K7AOU, Ken Munford, W7IFJ (now N7KM), and Don Blanchard, WA7GTU.

The constitution and by-laws were written at this meeting. The name of Rainbow Canyons Amateur Radio Club was suggested by Sharon Chidester and was meant to describe the area in which we live. The club letterhead (See below) was designed at a later date using a sketch by Jan Munford, KB7UVO and was printed in two colors by Don Blanchard, WA7GTU.

Club membership has grown over the years and while not everyone belongs to the club, we have approximately 200 amateurs in the area. A number of these are husband and wife teams.





February 3, 2026 by Linda Loosli

## What History Teaches Us About Emergency Preparedness

Today, let's talk about what history has taught us about emergency preparedness. I'm talking about previous disasters. Natural disasters, economic crises, and infrastructure failures have shaped communities throughout history. From hurricanes and wildfires to blackouts and pandemics, each event leaves behind hard-earned lessons.

Unfortunately, many of the same mistakes are repeated. Understanding the lessons learned from past disasters can help individuals and families prepare more effectively, reduce panic, and save lives. Preparedness is not fear-based—it is wisdom-based on experience. This article breaks down the most important emergency lessons history has taught us and how you can apply them today.

### 1. Disasters Happen Faster Than Expected

One of the biggest lessons from past disasters is how **quickly normal life can change**.

- Power grids can fail in seconds

- Roads can become impassable within minutes

- Stores shelves can empty in hours

- Hurricane Katrina, winter storms in Texas, and widespread blackouts all proved that waiting until the last minute often leaves people without food, water, or fuel.

Lesson learned:

- Preparation must happen **before** warnings are issued.

### 2. Government Help Is Often Delayed

Emergency responders work hard, but during large-scale disasters, they are overwhelmed. History shows that:

- Aid may take days—or weeks—to arrive

- Rural areas and older residents are often last reached

- Communication failures slow response times

- The government may NEVER show up

- Do NOT count on FEMA

- Be prepared to take care of your family

- After major hurricanes, earthquakes, and ice storms, many families were on their own far longer than expected.

Lesson learned:

- You should be prepared to be self-reliant for **at least 72 hours**, and ideally **7–14 days**.

### 3. Water Is the First and Most Critical Need

In nearly every disaster—floods, earthquakes, power outages, or infrastructure failures—clean water becomes scarce quickly.

- Municipal water systems fail

- Boil notices are issued

- Bottled water disappears from shelves

- People can survive weeks without food, but only days without water. **Continued on page 13**

The Rainbow Canyons Amateur Radio Club (RCARC)  
is Sponsoring an Amateur Radio

# Technician Class

Beginner Level for Ham Radio

Dates: Thursdays - March 5, 12, 19, 26 and April 2nd, 2026  
with the test, Thursday April 9, 2026  
Time: 6:00 pm - 9:00 pm

Where: Cedar City Senior Center  
489 E 200 South, Cedar City, UT 84720  
Downstairs, entrance Northeast corner

Class Cost: Free  
ARRL Test Fee \$15  
FCC License Fee \$35

Study Manual: Free Download  
[www.ad7fo.com/training.html](http://www.ad7fo.com/training.html)  
Click on Amateur Licenses Technician Syllabus  
(green button on left) to download. Please bring to class



Contact to Register:

Linda Shokrian KG7PBX  
435-867-5914 or  
email: [Lgshokrian@gmail.com](mailto:Lgshokrian@gmail.com)

# What History Teaches Us About Emergency Preparedness

Lesson learned: **Continued from page 11**

Store water first. Aim for **4 gallons per person per day**, plus extra for pets and sanitation. You need to decide how many days' worth of water to store. Start small and build up your inventory.

## 4. Power Outages Create Cascading Emergencies

Past disasters reveal that losing electricity affects far more than lights:

- No refrigeration for food or medications

- No heat or air conditioning

- No phone charging or internet

- Gas pumps and ATMs stop working

Extended power outages during winter storms and heat waves have been especially dangerous for older residents.

Lesson learned:

Plan for life without electricity, lighting, cooking, warmth, cooling, and communication.

## 5. Grocery Stores Are Not Emergency Warehouses

One of the most repeated lessons from past emergencies is how **fast store shelves empty**.

- Panic buying worsens shortages

- Deliveries are delayed or canceled

- People without transportation are stranded

Relying on "just running to the store" has left millions of people without food during emergencies.

Lesson learned:

Keep a rotating pantry with shelf-stable foods you already eat.

## 6. Communication Breakdowns Increase Fear

When cell towers fail, the internet goes down, or phones die, fear and misinformation spread quickly.

Past disasters show that a lack of communication causes:

- Confusion and panic

- Separation from loved ones

- Missed emergency instructions

Lesson learned:

Have multiple ways to communicate, including battery-powered radios and written emergency plans.

## 7. Community Matters as Much as Supplies

History consistently shows that communities that help each other recover faster.

- Neighbors checking on older neighbors

- Sharing tools, food, or skills

- Community-led cleanups and rebuilding

Disasters expose weaknesses, but they also reveal kindness.

Lesson learned:

Preparedness is not just personal, it's communal.

## 8. Older Neighbors and Vulnerable Populations Are at Higher Risk

Past disasters have disproportionately affected:

- Older People

- People with medical conditions

- Those with mobility challenges

- Families with young children

Lack of planning around medications, power-dependent medical devices, and transportation has led to tragic outcomes.

**Continued on page 17**

# Ham Radio Word Search

## Ham Radio Licensing

H	W	N	P	E	N	H	F	K	G	F	G	F	S	A
R	Y	O	R	J	O	D	U	G	N	I	T	S	E	T
G	X	I	I	M	I	C	J	N	A	C	G	U	S	N
N	F	S	V	X	T	H	B	K	U	U	A	M	T	N
I	Y	S	I	L	A	C	A	L	L	S	I	G	N	G
S	W	M	L	A	N	Y	M	B	Y	I	B	D	E	V
N	U	E	E	Q	I	H	C	D	L	R	A	B	M	N
E	V	S	G	P	M	N	U	O	C	M	O	H	E	J
C	J	U	E	R	A	C	Q	N	A	C	P	H	R	I
I	M	H	S	J	X	V	E	T	F	Q	E	Q	I	D
L	T	K	J	M	E	A	E	J	T	B	R	T	U	K
N	O	I	T	A	L	U	G	E	R	L	A	R	Q	M
V	A	R	T	B	R	D	B	A	T	A	T	V	E	D
E	D	U	Z	O	J	X	D	L	I	X	O	A	R	X
T	H	J	P	U	S	W	Q	Z	L	J	R	E	K	E

Licensing	Amateur	Examination	Regulation	Requirements
Operator	Privileges	Call Sign	Testing	

## ***Steps to Renew Your Ham Radio License***

**Access the System:** Go to the FCC Universal Licensing System (ULS) website.

**Log In:** Click “Online Filing” and log in using your FCC Registration Number (FRN) and password.

**Find License Manager:** Select “License Manager” on the left-hand menu.

**Renew:** Click “Renew License” on the left-hand side.

**Select License:** Select your call sign (s) and click “Add” to move them to the “Licenses to Renew” list, then click continue.

**Review and Submit:** Review your information, answer the required questions, and submit.

**Pay Fees:** Pay the \$35.00 application fee (as of April 2022) via the Commission Registration System (CORES).

### **Important Considerations**

**Renewal Window:** You can renew within 90 days before your license expires, or up to two years after it expires.

**Grace Period:** If you are within the two year grace period after expiration, you can still renew, but you cannot operate until the renewal is granted.

**Fees:** A \$35.00 fee is required for each renewal.

**Expired over two years:** If your license has been expired for more than two years, you cannot renew it and must retake the Technician class exam.

**Updating Info:** You can update your contact information during the renewal process.



# RCARC February Membership Monthly Meeting Pictures

Continued from page 16



The presentation on Sigle Sideband TV is underway



Russ (N7BO) doing a verbal presentation on what SSTV is with Brant (KJ7LTQ) in rear.



Brant (KJ7LTQ) demonstrating how easy it is to send pictures from a handheld radio to your phone.

## ARRL Video Helps Members Navigate Digital Magazines

ARRL members have [digital access](#) to four high quality magazines: QST, On the Air, QEX, and NCJ. If you have questions or concerns about how to get the most out of the digital editions, "How to View ARRL Magazines Digitally" on the ARRLHQ YouTube channel, will help walk you through it.



The [video on YouTube](#) makes it easy for members to navigate the digital editions of QST, On the Air, QEX, and NCJ.

The video, hosted by Jherica Goodgame, KI5HTA, explores the features of the digital presentation including switching between magazines, saving to PDF, searching for content, bookmarking's, and zooming in to content. It covers the web browser version, as well as the Android and iOS applications.

If you download the ARRL magazines app for Android or iOS, ARRL will send a notification to your device when a new edition is available for reading. They are also available on Amazon Kindle.

The video can be viewed at <https://youtu.be/vmZfIC2IUls>

## Answers to Ham Radio Terminology Word Scramble on page 10

#	Word
1.	Modem
2.	Battery
3.	Digipeater
4.	Director
5.	Voice
6.	Ticket
7.	Charge
8.	Jumper
9.	Hertz
10.	Filter

# What History Teaches Us About Emergency Preparedness

## 9. Skills Are as Important as Supplies

Many people had supplies during past disasters—but lacked the skills to use them.

Examples include:

- Cooking without electricity
- Safely storing food
- First aid and basic medical care
- Home repairs after damage

Lesson learned:

Skills provide long-term resilience when supplies run out.

## 10. Preparedness Reduces Panic and Trauma

One overlooked lesson is the **mental and emotional impact** of disasters.

Those who were prepared:

- Felt calmer
- Made better decisions
- Helped others more effectively
- Preparedness brings confidence, not fear.

Lesson learned:

Planning protects mental health as much as physical safety.

## Learn From the Past to Protect the Future

History does not repeat itself exactly, but it **rhymes**. Lessons learned from past disasters are clear:

- Prepare early
- Store water and food
- Plan for power loss
- Build community
- Learn practical skills
- Emergency preparedness is not about expecting the worst—it's about being ready for reality.
- The best time to prepare was yesterday. The second-best time is today.

## The Most Important Items to Have on Hand During an Emergency

When a disaster strikes, having the right supplies can make the difference between panic and confidence. Past emergencies have shown that many people were not unprepared because they didn't care, but because they didn't know what truly mattered.

These are the **most important emergency items to have on hand** for any situation, whether it's a power outage, winter storm, natural disaster, or supply chain disruption.

### 1. Water (Your #1 Priority)

Clean water is the most critical emergency supply.

**What to have:**

- At least **4 gallons per person per day**
- A minimum of **3–7 days' supply**
- Extra water for pets
- Water purification tablets or water filtering systems like Big Berkey and Porta Well.
- Without water, everything else becomes harder.

### 2. Shelf-Stable Food

Food shortages happen quickly during emergencies.

**Best options:**

- Canned meats, vegetables, and fruits
- Rice, pasta, oats, and dry beans
- Peanut butter and shelf-stable spreads
- Ready-to-eat meals (no cooking required)
- Choose foods your family already eats.

**Continued on page 18**

# What History Teaches Us About Emergency Preparedness

Continued from page 17

## 3. Ways to Cook Without Power

Many people have food, but no way to prepare it.

### Options include:

Propane or butane camp stove

Charcoal grill (outdoor use only)

Sterno or emergency cooking fuel

Manual can opener

Never use cooking devices indoors unless approved for indoor use.

## 4. Lighting and Power

Darkness adds stress and danger.

### Must-have items:

Flashlights (one per person)

Headlamps

Battery-powered lanterns

Extra batteries

Solar or hand-crank chargers – I have solar flashlights charging in my window sills all the time.

## 5. Heat, Cooling, and Weather Protection

Extreme temperatures can be life-threatening.

### Cold weather:

Extra blankets or sleeping bags

Warm clothing and hats

Thermal layers

### Hot weather:

Battery-powered fans

Cooling towels

Shade and ventilation plans

## 6. First Aid and Medications

Medical access may be limited.

### Essential items:

Fully stocked first aid kit

Prescription medications (7–14 days if possible)

Pain relievers and fever reducers

Medical supplies for chronic conditions

Caregivers should plan carefully here.

## 7. Communication and Information

Staying informed prevents panic.

### Recommended items:

Battery-powered or hand-crank radio

Written emergency contact list

Local maps

Whistle or signaling device

## 8. Cash and Financial Access

ATMs and card systems often fail.

### Have on hand:

Small bills

Coins for vending or laundromats

Copies of important documents

Continued on page 20

# Different Types of Connectors

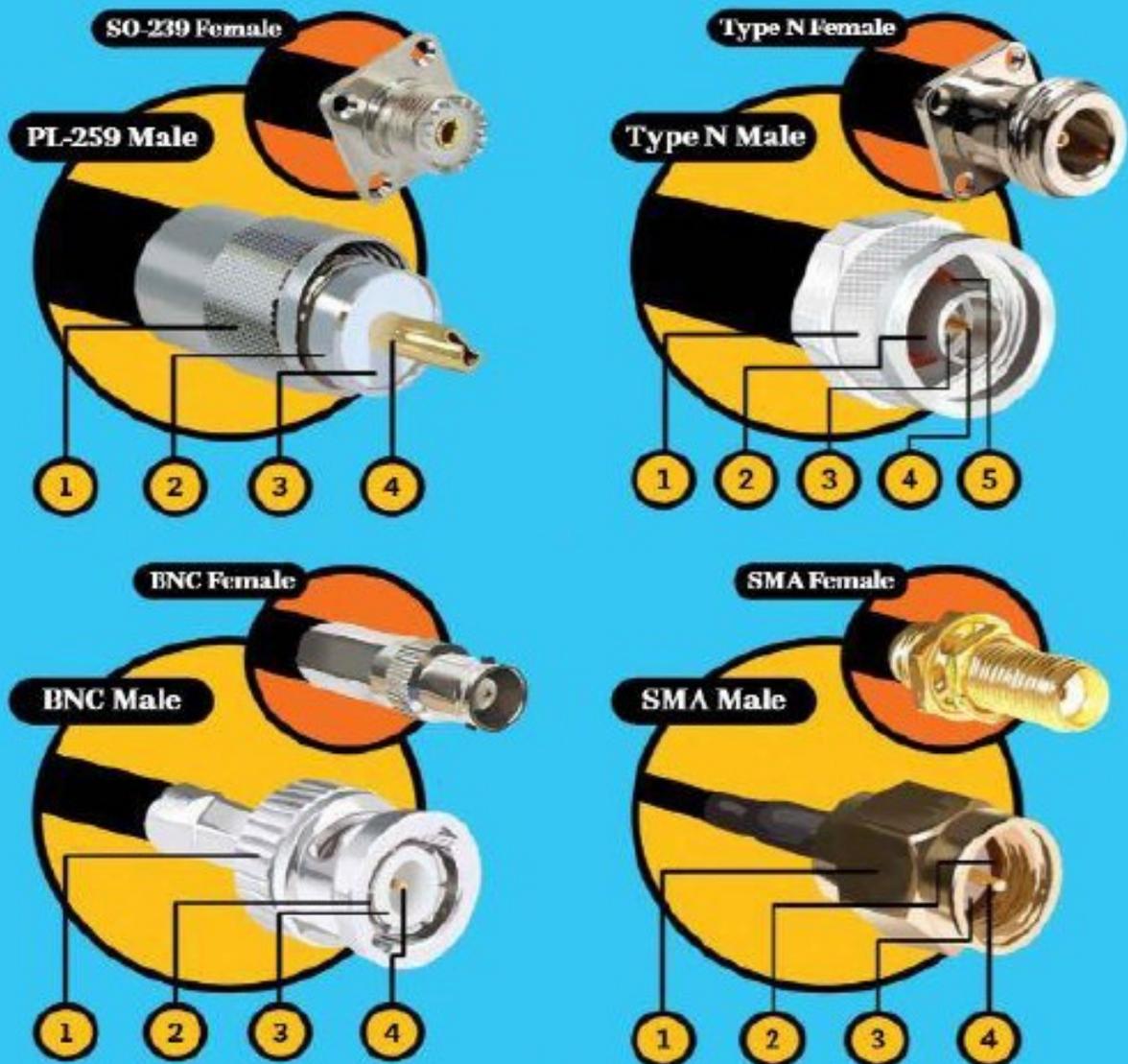
THE BIG PICTURE

## Getting Connected

The world of electronics is populated by an almost countless number of connectors. We use them to attach wires and cables to various types of equipment, or to each other.

When you attach a lamp cord to a wall outlet, you're using an *ac plug*. Your smartphone battery might be recharged through a type of *USB plug*.

While radios and antennas use many specialized connectors, the four most common are PL-259, Type N, BNC, and SMA.



- |              |                                                                                      |
|--------------|--------------------------------------------------------------------------------------|
| 1 Shell      | Screws on (or, in the case of the BNC, twists on) to attach to the female connector. |
| 2 Shield     | Attaches to the outer shield of the coaxial cable.                                   |
| 3 Insulator  | Separates the shield from the center pin.                                            |
| 4 Center Pin | Attaches to the center wire of the coaxial cable.                                    |
| 5 Gasket     | Keeps the inside of the connector free from moisture.                                |

# What History Teaches Us About Emergency Preparedness

Continued from page 18

## 9. Hygiene and Sanitation Supplies

Sanitation problems escalate fast.

### Include:

- Toilet paper and wipes
- Trash bags and zip-top bags
- Hand sanitizer and soap
- Feminine hygiene items
- Disposable gloves
- Diapers for those little guys

## 10. Tools and Safety Items

Basic tools solve many problems.

### Important tools:

- Multi-tool or basic tool kit
- Duct tape
- Work gloves
- Fire extinguisher
- Smoke and carbon monoxide detectors

## Why is Emergency Preparedness Important?

### 12 Reasons Why You Should Prep

### Final Word

Every disaster leaves behind a lesson—but only those who pay attention benefit from it. History has shown that emergencies rarely unfold as we expect, and help doesn't always arrive quickly. The families who fare best aren't the luckiest; they're the ones who prepared in advance.

Emergency preparedness is not about fear or panic. It is about responsibility, resilience, and peace of mind. When you take small steps today—storing water, building a food supply, learning practical skills, and connecting with your community—you reduce risk and increase confidence for tomorrow.

The past has already taught us what we need to know. The question is whether we'll use those lessons before the next disaster arrives so we can be properly prepared. May God bless this world,  
Linda



# ISS SPACE STATION

**This event took place on February 19, 2026. If you would like to hear the audio of the conversation check out the URL below.**

ARISS News Release 26-05

ARISS Contact is Scheduled with Students at  
The Center for Creativity, Innovation, & Discovery, Providence, UT

February 17, 2026—Amateur Radio on the International Space Station (ARISS) has received schedule confirmation for an ARISS radio contact between an astronaut aboard the International Space Station (ISS) and students at the Center for Creativity, Innovation, and Discovery located in Providence, UT. ARISS conducts 60 to 100 of these special amateur radio contacts each year between students around the globe and crew members with ham radio licenses aboard the ISS.

The Center for Creativity, Innovation, and Discovery is a K–8 public charter school. Through integrated STEM projects, maker space experiences, and inquiry-based learning, students design, build, test, and refine their ideas using tools such as robotics, coding platforms, digital design software, and fabrication equipment. Collaboration and critical thinking are embedded in all grade levels, preparing students to engage thoughtfully with complex challenges.

This ARISS contact will allow students to ask their questions of astronaut Chris Williams, amateur radio call sign KJ5GEW. The down-link frequency for this contact is 145.800 MHz and may be heard by listeners in the ISS footprint that also encompasses the amateur radio ground station in Providence. Amateur radio operators using call sign W7IVM will operate the ground station to establish and maintain the ISS connection.

The ARISS radio contact is scheduled for February 19, 2026 at 10:13 am MST (Providence, UT) (17:13 UTC, 12:13 pm EST, 11:13 am CST, 9:13 am PST).

**If You would like to hear the audio of the event please access the following URL: **Note: You will only hear the Astronauts answering the Students questions. There will be a pause at the beginning and when students are asking questions.****

<https://drive.google.com/file/d/11S8oUwjX8ija2doh2OH6QPgFNJYdsunO/view?usp=sharing>

**Rainbow Canyons Amateur Radio Club Member  
George Gibbons (KE7DDX) – Silent Key**

*George Gibbons*

1951 - 2026

George was born on July 31st, 1951 and passed away on  
February 5th, 2026 at the age of 74

